IN THE CLAIMS

Please re-consider the claims as follows:

Claim 1 (Previously Presented): An image information encoding apparatus adapted for encoding an input image signal at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image by orthogonal transform and motion prediction and/or compensation processing to generate image compressed information, the image information encoding apparatus comprising:

a motion prediction and/or compensation unit configured to perform motion prediction and/or compensation processing based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image,

wherein the motion prediction and/or compensation unit includes a first filter and performs motion prediction and/or compensation processing by using the first filter with respect to the interframe forward predictive encoding image, and includes a second filter and performs motion prediction and/or compensation processing by using the second filter, the second filter having a fewer number of taps relative to the first filter with respect to the interframe bi-directional predictive encoding image.

Claim 2 (Previously Presented): The image information encoding apparatus as set forth in claim 1,

wherein the motion prediction and/or compensation unit is configured to select, as an interpolation method with respect to the interframe bi-directional predictive encoding image, a method in which operation quantity and a number of memory accesses are reduced to a greater degree as compared to the interframe forward predictive encoding image.

Claim 3 (Previously Presented): The image information encoding apparatus as set forth in claim 1,

wherein the motion prediction and/or compensation unit is configured to have a same pixel accuracy of motion prediction and/or compensation processing for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 4 (Previously Presented): The image information encoding apparatus as set forth in claim 1,

wherein the motion prediction and/or compensation unit is configured to select motion prediction/compensation processing by different pixel accuracies for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 5 (Previously Presented): The image information encoding apparatus as set forth in claim 1,

wherein the motion prediction and/or compensation unit is configured to to perform motion prediction and/or compensation of 1/4 pixel accuracy, and to perform, with respect to the interframe forward predictive encoding image, interpolation processing of 1/2 pixel accuracy by using filter coefficients having 6 taps expressed below

{1, -5, 20, 20, -5, 1}/32

to perform interpolation processing of 1/4 pixel accuracy by linear interpolation on the basis of generated pixels.

Claim 6 (Previously Presented): The image information encoding apparatus as set forth in claim 1,

wherein the motion prediction and/or compensation unit is configured to perform motion prediction and/or compensation processing of 1/4 pixel accuracy by linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claim 7 (Previously Presented): The image information encoding apparatus as set forth in claim 4,

wherein the motion prediction and/or compensation unit is configured to perform motion prediction and/or compensation processing of 1/4 pixel accuracy with respect to the interframe forward predictive encoding image, and to perform motion prediction and/or compensation processing of 1/2 pixel accuracy with respect to the interframe bi-directional predictive encoding image.

Claim 8 (Previously Presented): The image information encoding apparatus as set forth in claim 4,

wherein information relating to pixel accuracy of motion prediction and/or compensation processing are respectively embedded in a MotionResolution field at RTP layer within the image compressed information with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 9 (Previously Presented): An image information encoding method for encoding an input image signal at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image

by orthogonal transform and motion prediction and/or compensation processing to generate image compressed information, the image information encoding method including:

performing motion prediction and/or compensation processing, using an image information encoding apparatus, based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image,

wherein the performing motion prediction and/or compensation processing ~~step~~ comprises performing motion prediction and/or compensation processing by using a first digital filter with respect to the interframe forward predictive encoding image, and performing motion prediction and/or compensation processing by using a second digital filter having a fewer number of taps relative to the first filter with respect to the interframe bi-directional predictive encoding image.

Claim 10 (Previously Presented): A computer-readable storage medium having embedded therein instructions, which when executed by a processor, cause the processor to perform processing which encodes an input image signal at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image by orthogonal transform and motion prediction and/or compensation processing to generate image compressed information, the processing including:

performing motion prediction and/or compensation processing based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive image,

wherein the performing motion prediction and/or compensation processing comprises performing motion prediction and/or compensation processing by using a first filter with

respect to the interframe forward predictive encoding image, and performing motion prediction and/or compensation processing by using a second filter having a fewer number of taps relative to the first filter with respect to the interframe bi-directional predictive encoding image.

Claim 11 (Withdrawn): An image information decoding apparatus adapted for decoding, by inverse-orthogonal transform and motion prediction/compensation, an image compressed information at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image which have been generated at an image information encoding apparatus,

the image information decoding apparatus comprising:

motion prediction/compensation means for performing motion prediction/compensation processing based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image,

wherein the motion prediction/compensation means performs motion prediction/compensation processing by using a first filter with respect to the interframe forward predictive encoding image, and performs motion prediction/compensation processing by using a second filter having the number of taps lesser than that of the first filter, or linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claim 12 (Withdrawn): The image information decoding apparatus as set forth in claim 11,

wherein the motion prediction/compensation means selects, as an interpolation method with respect to the interframe bi-directional predictive encoding image, a method in

which operation quantity and the number of memory accesses are reduced to more degree as compared to the interframe forward predictive encoding image.

Claim 13 (Withdrawn): The image information decoding apparatus as set forth in claim 11,

wherein the motion prediction/compensation means have pixel accuracies of motion prediction/compensation processing which are equal to each other at the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 14 (Withdrawn): The image information decoding apparatus as set forth in claim 11,

wherein the motion prediction/compensation means are adapted so that motion prediction/compensation processing by different pixel accuracies can be selected at the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 15 (Withdrawn): The information decoding apparatus as set forth in claim 11,

wherein the motion prediction/compensation means serves to perform motion prediction/compensation of 1/4 pixel accuracy, and generates interpolation processing of 1/2 pixel accuracy by using filter coefficients of 6 taps expressed below

{1, -5, 20, 20, -5, 1}/32

with respect to the interframe forward predictive encoding image to perform interpolation processing of 1/4 pixel accuracy by linear interpolation on the basis of generated pixels.

Claim 16 (Withdrawn): The image information decoding apparatus as set forth in claim 11,

wherein the motion prediction/compensation means performs motion prediction/compensation processing of 1/4 pixel accuracy by linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claim 17 (Withdrawn): The image information decoding apparatus as set forth in claim 14,

wherein the motion prediction/compensation means performs motion prediction/compensation processing of 1/4 pixel accuracy with respect to the interframe forward predictive encoding image, and performs motion prediction/compensation processing of 1/2 pixel accuracy with respect to the interframe bi-directional predictive encoding image.

Claim 18 (Withdrawn): The image information decoding apparatus as set forth in claim 14,

wherein information relating to pixel accuracy of motion prediction/compensation processing are respectively embedded in MotionResolution field at RTP layer within the image compressed information with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 19 (Withdrawn): An image information decoding method of decoding, by inverse-orthogonal transform and motion prediction/compensation processing, image compressed information at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image which have been generated at an image information encoding apparatus,

the image information decoding method including a prediction/compensation step of performing motion prediction/compensation processing based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image,

wherein the motion prediction/compensation step comprises: performing motion prediction/compensation processing by using a first filter with respect to the interframe forward predictive encoding image, and performing motion prediction/compensation processing by using a second filter having the number of taps lesser than that of the first filter or linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claim 20 (Withdrawn): A program for allowing computer to execute a processing which decodes, by inverse-orthogonal transform and motion prediction/compensation processing, image compressed information at least including intraframe encoding image, interframe forward predictive encoding image and interframe bi-directional predictive encoding image which have been generated at an image information encoding apparatus,

the program including a motion prediction/compensation step of performing motion prediction/compensation processing based on different interpolation methods with respect to the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image,

wherein the motion prediction/compensation step comprises: performing motion prediction/compensation processing by using a first filter with respect to the interframe forward predictive encoding image, and performing motion prediction/compensation processing by using a second filter having the number of taps lesser than that of the first filter or linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claims 21-86 (Canceled).

Claim 87 (Original): The image information encoding method according to Claim 9, further comprising:

selecting, as an interpolation method with respect to the interframe bi-directional predictive encoding image, a method in which operation quantity and a number of memory accesses are reduced to a greater degree as compared to the interframe forward predictive encoding image.

Claim 88 (Original): The image information encoding method according to Claim 9, wherein the performing motion prediction and/or compensation processing includes having a same pixel accuracy of motion prediction and/or compensation processing for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 89 (Original): The image information encoding method according to Claim 9, wherein the performing motion prediction and/or compensation processing includes having different pixel accuracies of motion prediction and/or compensation processing for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 90 (Original): The image information encoding method according to Claim 9, wherein the performing motion prediction and/or compensation processing includes performing motion prediction and/or compensation of 1/4 pixel accuracy, and performing,

with respect to the interframe forward predictive encoding image, interpolation processing of 1/2 pixel accuracy by using filter coefficients having 6 taps expressed below

$$\{1, -5, 20, 20, -5, 1\}/32$$

to perform interpolation processing of 1/4 pixel accuracy by linear interpolation on the basis of generated pixels.

Claim 91 (Original): The image information encoding method according to Claim 9, wherein the performing motion prediction and/or compensation processing includes performing motion prediction and/or compensation processing of 1/4 pixel accuracy by linear interpolation with respect to the interframe bi-directional predictive encoding image.

Claim 92 (Original): The computer-readable storage medium according to Claim 10, further comprising:

selecting, as an interpolation method with respect to the interframe bi-directional predictive encoding image, a method in which operation quantity and a number of memory accesses are reduced to a greater degree as compared to the interframe forward predictive encoding image.

Claim 93 (Original): The computer-readable storage medium according to Claim 10, wherein the performing motion prediction and/or compensation processing includes having a same pixel accuracy of motion prediction and/or compensation processing for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 94 (Original): The computer-readable storage medium according to Claim 10, wherein the performing motion prediction and/or compensation processing includes having different pixel accuracies of motion prediction and/or compensation processing for the interframe forward predictive encoding image and the interframe bi-directional predictive encoding image.

Claim 95 (Original): The computer-readable storage medium according to Claim 10, wherein the performing motion prediction and/or compensation processing includes performing motion prediction and/or compensation of 1/4 pixel accuracy, and performing, with respect to the interframe forward predictive encoding image, interpolation processing of 1/2 pixel accuracy by using filter coefficients having 6 taps expressed below

$$\{1, -5, 20, 20, -5, 1\}/32$$

to perform interpolation processing of 1/4 pixel accuracy by linear interpolation on the basis of generated pixels.

Claim 96 (Original): The computer-readable storage medium according to Claim 10, wherein the performing motion prediction and/or compensation processing includes performing motion prediction and/or compensation processing of 1/4 pixel accuracy by linear interpolation with respect to the interframe bi-directional predictive encoding image.